

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/712,739 11/13/2003		Petar R. Dvornic	MIC35 P-334	8890	
277	7590 02/02/2006		EXAMINER		
PRICE HEN	<b>EVELD COOPER DEW</b>	CEPERLEY, MARY			
695 KENMOO	OR, S.E.				
P O BOX 256	7	ART UNIT	PAPER NUMBER		
GRAND RAP	IDS, MI 49501	1641			
			D. TE \ ( . V ED . 00/00/200		

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicatio	n No.	Applicant(s)				
Office Action Summary		10/712,73	9	DVORNIC ET AL.				
		Examiner		Art Unit				
		Mary (Moll	y) E. Ceperley	1641				
Period fo	The MAILING DATE of this communication app or Reply	pears on the	cover sheet with ti	ne correspondence a	ddress			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL' CHEVER IS LONGER, FROM THE MAILING Domisions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. It is period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF TH 136(a). In no eve will apply and wil e, cause the appli	IS COMMUNICAT nt, however, may a reply to expire SIX (6) MONTHS cation to become ABAND	TON.  be timely filed  from the mailing date of this of ONED (35 U.S.C. § 133).				
Status								
1)[🛛	Responsive to communication(s) filed on <u>17 N</u>	Jovember 20	005					
2a)□	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
٧,۵	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims	,		,				
· _		in the applic	eation					
4)[	Claim(s) <u>2-16,18-22 and 24-30</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.							
5\⊠	Claim(s) <u>13-16 and 18</u> is/are allowed.							
6)⊠								
/	•							
7)∐ 8)□								
اـــا(٥	Claim(s) are subject to restriction and/o	or election re	equirement.					
Applicat	ion Papers							
9)	The specification is objected to by the Examine	er.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	Replacement drawing sheet(s) including the correct	tion is require	ed if the drawing(s) is	s objected to. See 37 C	FR 1.121(d).			
11)	The oath or declaration is objected to by the Ex	xaminer. No	te the attached Of	fice Action or form P	TO-152.			
Priority (	under 35 U.S.C. § 119							
•	Acknowledgment is made of a claim for foreign  ☐ All b)☐ Some * c)☐ None of:			9(a)-(d) or (f).				
	1. Certified copies of the priority documents have been received.							
•	2. Certified copies of the priority document	•			_			
	3. Copies of the certified copies of the prio			eived in this Nationa	l Stage			
	application from the International Burea	•	• • •					
* 5	See the attached detailed Office action for a list	of the certif	ied copies not rec	eived.				
	·	٠						
					•			
Attachmen	t(s)							
1) Notic	e of References Cited (PTO-892)		4) Interview Summ					
	e of Draftsperson's Patent Drawing Review (PTO-948)		Paper No(s)/Ma	ail Date nal Patent Application (PT	·O-152)			
	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date	1	6) Other:	.a. r atom Application (F I				

Art Unit: 1641

1) A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 17, 2005 has been entered.

Page 2

2) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

*3)* Claims 2-12, 19-22 and 24-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite and confusing for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The "compound" of claim 19 appears to define <u>one</u> of the <u>three</u> "Dendrimer-S.G." moieties attached to the "Dendrimer" core as depicted in Fig. 2. In this case the "dendritic polymer moieties" are the groups radiating outward from the "dendrimer", some of which contain "S.G." groups, there being no requirement in the claim language that the "dendritic polymer moieties" themselves contain any diacetylenic linkages as shown in the structures of FIGS. 3 and 4. These "dendritic polymer moieties" are "linked to one another by a moiety having alternating conjugated double and triple bonds" (the circular double-triple bond structure seen in each of the three structures pendant to the core dendrimer in FIG. 2). However, applicants November 17, 2005 Remarks indicate that the "compound" meant to be claimed is the complete <u>multi-Dendrimer-S.G.</u> structure of the type depicted in FIG. 2 {Remarks, page 9, first full paragraph}. Note that the language of claim 19 does not require any <u>core</u> dendrimer structure. Further, claim 19, as currently amended, states that the "dendritic polymer moieties" have "at least two different types of reactive end-groups". While FIG. 3 shows the "dendritic polymer <u>core</u>" having "two different types of reactive end-groups", the FIG. 2 structure does not depict the "dendritic polymer

Art Unit: 1641

moieties", i.e. the groups radiating outward from the dendrimer <u>core</u>, as having different reactive endgroups.

4) The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

obviousness-type double patenting as being unpatentable over claims 1-7 of copending Application No. 10/068,378. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of 10/068,378 appears to encompass the structures of claim 19 of 10/712,739. Both claim 1 of 10/068,378 and claim 19 of 10/712,739 appear to be claiming the same structures, i.e. one of the pendant dendrimer-S.G. groups of the structure of FIG. 2 of 10/712,739 and the structure of FIG. 3 (right hand structure) of 10/068,378. See also, the discussion of paragraph *3)* above regarding the uncertainty of exactly what structure is meant to be claimed. Applicants should discuss on the record any possible intended distinction between the limitations "intramolecularly linked" of claim 1 of 10/068,378 and "linked to one another by a moiety having alternating conjugated double and triple bonds" of claim 19 of 10/712,739.

Application/Control Number: 10/712,739

Art Unit: 1641

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims

have not in fact been patented.

6) The prior art does not describe the compounds of this application which are comprised of a

dendritic polymer core having at least two different types of reactant end-groups some of which end-

groups are attached to diacetylene-containing moieties having sensory groups attached {FIG. 3}.

7) Claims 13-16 and 18 are allowed.

8) Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Mary (Molly) E. Ceperley whose telephone number is (571) 272-0813. The

examiner can normally be reached from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Long V. Le, can be reached on (571) 272-0823. The fax phone number for the organization where this

application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at

866-217-9197 (toll-free).

January 24, 2006

Mary E. Ceperley Mary (Molly) E. Ceperley Page 4

Primary Examiner

Art Unit 1641